

## Don't Trash the Earth Spreadsheet Instructions

### Step 1: Collect Data

Collect data for the trash unit (school waste management, family garbage production, cost analysis, and so forth).

### Step 2: Create a Spreadsheet

Open a worksheet in a spreadsheet application. In cell A1, type the title of your study (for example, type **How much garbage does my family of four produce?**). To make your title go across several columns, highlight the cells you want it to cover, select the **Format** menu, click **Cells**, and click the **Alignment** tab. In the **Text control** section, click **Merge cells**, and click **OK**. You can now center your title and change the font size and style. You may even change the background fill color.

In row 3, beginning in cell A3, type column and row headings to label the items that you measured or counted (see the following example). Next, enter your data in columns B or columns B and C.

	A	B	C
1	<b>How much garbage does my family of four produce?</b>		
2			
3	<b>Day</b>	<b># of tall kitchen bags</b>	<b># of members in my family</b>
4	Monday		
5	Tuesday		
6	Wednesday		
7	Thursday		
8	Friday		
9	Saturday		
10	Sunday		
11	Total		
12	Average per person		

### Step 3: Create a Chart or Graph

Highlight all of the cells that you want to represent graphically. Click **Chart** from the **Insert** menu. Choose the chart type that you think best represents your data, click the **Next** button, and then follow the specific directions for the chart or graph. Add titles for the chart and its axes if appropriate. Click the **Gridlines** tab and experiment with gridline options if gridlines apply to your type of chart or graph. Choose gridlines that make understanding your data easier. Click the **Legend** tab, choose a location for the legend, and then click **Next**. Place your chart or graph as an object on the original worksheet, so that you can see the worksheet entries as you examine the object, or place your chart or graph on a separate sheet of your worksheet and label it (see the following example, which represents the spreadsheet data in the next sample).



Explore several options of charts to see which one best represents your data! Or choose several different types of questions from the survey to represent with different charts.

#### Step 4: Create a Formula Using the Formula Bar

To create a formula for automatic calculation, click the cell that you want to contain the calculation. Type an equal sign (=) in the Formula Bar. Determine the operation or formula you want to calculate. For example, to find the average # of trash bags per family member, you would divide the total number of tall kitchen bags divided by the number of people in your family. Your formula might look similar to **=B11/C11**.

#### Step 5: Create a Formula Using the Insert Function Dialog Box

To create a formula using the Insert Function dialog box, click the cell that you want to contain the function. Choose the **Insert** menu, and click **Function**. The Insert Function dialog box opens. Choose a function (many functions are available—click each function to see a short description). Click **OK**. In the **Number 1** text box, enter the cells you want the function to include. For instance, in this example, type **B4:B10**. Click **OK**. Your data is calculated and shown in the cell you selected.

	A	B	C
1	How much garbage does my family of four produce?		
2			
3	Day	# of tall kitchen bags	
4	Monday	2	
5	Tuesday	3	
6	Wednesday	2	
7	Thursday	2	
8	Friday	4	
9	Saturday	4	
10	Sunday	5	
11	Total	22	
12	Average per person	5.5	
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

To get the sum select the cell (B11) and choose function from the insert menu and choose SUM from the menu of choices. Choose the range of cells you want to add (B4:B10)

to get the average # of kitchen bags per member of the family click on the cell (B12), click on the = sign in the toolbar and enter the formula =B11/the # of family members